Listing of Claims

This listing of claims replaces all prior versions and listings of claims in the application:

Claims 1.-12. (Canceled)

13. (Currently Amended) A method[[,]] comprising:

receiving a cardiac biological signal that includes information describing events, wherein events comprise periods in time when an information content of the cardiac biological signal is of increased relevance to a particular purpose and the events are demarcated by periods of time that are not of increased relevance to the particular purpose;

classifying the events into two or more categories based on cardiac conditions indicated by the information describing each event;

determining a merit of the information ~~in the cardiac biological signal~~ describing each event based on one or more of a severity of [[a]] the cardiac condition associated with the event and a quality of the information describing the event;

transmitting, for medical purposes, information describing a first proper subset of the events in a first of the categories that have merits meeting a first merit criterion to a remote medical receiver; [[and]]

discarding information describing a second proper subset of the events in the first of the categories that have merits that fail to meet the first merit criterion;

transmitting, for medical purposes, information describing a third proper subset of the events in a second of the categories that have merits meeting a second merit criterion to the remote medical receiver, wherein the second category differs from the first category; and

discarding information describing a fourth proper subset of the events in the second of the categories that have merits that fail to meet the second merit criterion.

14. (Currently Amended) The method of claim 13, wherein transmitting the information describing the first proper subset of events comprises transmitting the information describing the first proper subset of events meeting a first merit criterion that is based on merits of other events in the first of the categories.

15. (Currently Amended) [[The]] A method ~~of claim 13, wherein~~ comprising:

receiving a cardiac biological signal that includes information describing events, wherein events comprise periods in time when an information content of the cardiac biological signal is of increased relevance to a particular purpose and the events are demarcated by periods of time that are not of increased relevance to the particular purpose;

determining [[the]] a merit of information describing each event ~~comprises determining the merit~~ based on both the severity of the cardiac condition indicated by the information describing the event and the quality of the information describing the event;

transmitting, for medical purposes, information describing a first proper subset of the events that have merits meeting a merit criterion to a remote medical receiver; and

discarding information describing a second proper subset of the events that have merits that fail to meet the merit criterion.

16. (Currently Amended) The method of claim 13, wherein transmitting the information describing the first proper subset comprises transmitting the information describing events that have merits among a certain number of the most meritorious in the first of the categories.

17. (Previously Presented) The method of claim 13, wherein:

the first proper subset of the events comprises events that occur within a certain time span and excludes events occurring outside the certain time span.

18. (Previously Presented) The method of claim 17, wherein:

the first proper subset of the events comprises events that occur within a predetermined time span and excludes events occurring outside the predetermined time span.

Claims 19.-25. (Canceled)

26. (Previously Presented) The method of claim 13, wherein receiving the cardiac biological signal comprises receiving a measurement of electrical potential.

27. (Canceled)

28. (Currently Amended) The method of claim [[27]] 13, wherein ~~identifying each~~ classifying the ~~event~~ events comprises ~~identifying~~ classifying the events as one or more of an asystole event, a tachycardia event, a bradycardia event, and an atrial fibrillation/flutter event based on identifying characteristics of these events.

29. (Currently Amended) The method of claim [[27]] 13, wherein ~~identifying each~~ classifying the ~~event~~ events comprises ~~identifying~~ classifying the ~~event~~ events based on a frequency of heart beats.

30. (Previously Presented) The method of claim 13, further comprising associating information describing each event in the first proper subset with information describing a time span in which the event occurred.

31. (Canceled)

32. (Currently Amended) The method of claim 30, wherein associating the information describing each event in the first proper subset with the information describing the time span comprises associating the information describing each event in the first proper subset with the information describing the time span when the event merit is among a predetermined number of the most meritorious events in the first of the categories.

33. (Previously Presented) The method of claim 30, wherein associating the information describing each event in the first proper subset with the information describing the time span comprises generating a data structure having a time stamp associated with the information describing the event.

34. (Previously Presented) The method of claim 13, further comprising comparing a first merit of information describing a first event with a second merit of information describing a second event to identify a more meritorious event.

35. (Previously Presented) The method of claim 34, further comprising creating an episode describing the more meritorious event.

36. (Previously Presented) The method of claim 35 wherein creating the episode comprises summarizing a relevance of the information describing the more meritorious event.

37. (Currently Amended) An article comprising one or more machine-readable media storing instructions operable to cause one or more machines to perform operations, the operations comprising:

receiving a cardiac biological signal that includes information describing events, wherein events comprise periods in time when an information content of the cardiac biological signal is of increased relevance to a particular purpose and the events are demarcated by periods of time that are not of increased relevance to the particular purpose;

classifying the events into two or more categories based on cardiac conditions indicated by the information describing each event;

determining a merit of the information ~~in the cardiac biological signal~~ describing each event based on one or more of a severity of [[a]] the cardiac condition associated with the event and a quality of the information describing the event;

transmitting, for medical purposes, information describing a first proper subset of the events in a first of the categories that have merits meeting a first merit criterion to a remote medical receiver; [[and]]

discarding information describing a second proper subset of the events in the first of the categories that have merits that fail to meet the first merit criterion;

transmitting, for medical purposes, information describing a third proper subset of the events in a second of the categories that have merits meeting a second merit criterion to the remote medical receiver, wherein the second category differs from the first category; and

discarding information describing a fourth proper subset of the events in the second of the categories that have merits that fail to meet the second merit criterion.

38. (Currently Amended) The article of claim 37, wherein transmitting the information describing the first proper subset of events comprises transmitting the information describing the first proper subset of events meeting a first merit criterion that is based on merits of other events in the first of the categories.

39. (Currently Amended) ~~The~~ An article ~~of claim 37~~ comprising one or more machine-readable media storing instructions operable to cause one or more machines to perform operations, the operations comprising:

receiving a cardiac biological signal that includes information describing events, wherein events comprise periods in time when an information content of the cardiac biological signal is of increased relevance to a particular purpose and the events are demarcated by periods of time that are not of increased relevance to the particular purpose;

~~wherein~~ determining ~~the~~ a merit of information describing each event ~~comprises determining the merit~~ based on both the severity of the cardiac condition indicated by the information describing the event and the quality of the information describing the event;

transmitting, for medical purposes, information describing a first proper subset of the events that have merits meeting a merit criterion to a remote medical receiver; and

discarding information describing a second proper subset of the events that have merits that fail to meet the merit criterion.

40. (Canceled)

41. (Previously Presented) The article of claim 37, wherein the operations further comprise associating information describing each event in the first proper subset with information describing a time span in which the event occurred.

42. (Canceled)

43. (Currently Amended) The article of claim 41, wherein associating the information describing each event in the first proper subset with the information describing the time span comprises associating the information describing each event in the first proper subset with the information describing the time span ~~when~~ in which the event merit is among a predetermined number of the most meritorious events in the first of the categories.

44. (Previously Presented) The article of claim 41,wherein associating the information describing each event in the first proper subset with the information describing the time span comprises generating a data structure having a time stamp associated with the information describing the event.

45. (Previously Presented) The article of claim 37, wherein the operations further comprise creating an episode describing the more meritorious event.

46. (Previously Presented) The article of claim 45, wherein creating the episode comprises summarizing a relevance of the information describing the more meritorious event.

47. (Previously Presented) The article of claim 37, wherein the cardiac biological signal comprises an electrocardiogram signal.

48. (Previously Presented) The article of claim 37, wherein:

a first event described in the cardiac biological signal has a first duration;

a second event described in the cardiac biological signal has a second duration; and

the first duration is not equal to the second duration.

49. (Currently Amended) The article of claim 37, wherein classifying the events ~~operations comprise~~ comprises ~~identifying~~ classifying a first event as a tachycardia event.

50. (Currently Amended) The article of claim 37, wherein classifying the events ~~operations comprise~~ comprises ~~identifying~~ classifying a first event as a bradycardia event.

51. (Currently Amended) The article of claim 37, wherein classifying the events ~~operations comprise~~ comprises ~~identifying~~ classifying a first event as an atrial fibrillation/flutter event.

52. (Previously Presented) The method of claim 13, wherein the cardiac biological signal comprises an electrocardiogram signal.

53. (Previously Presented) The method of claim 13, wherein:

a first event described in the cardiac biological signal has a first duration;

a second event described in the cardiac biological signal has a second duration; and

the first duration is not equal to the second duration.

54. (Currently Amended) The method of claim [[27]] 13, wherein ~~identifying~~ classifying the ~~event~~ events comprises ~~identifying~~ classifying a first event as a tachycardia event.

55. (Currently Amended) The method of claim [[27]] 13, wherein ~~identifying~~ classifying the ~~event~~ events comprises ~~identifying~~ classifying a first event as a bradycardia event.

56. (Currently Amended) The method of claim [[27]] 13, wherein i~~-identifying~~ classifying the ~~event~~ events comprises ~~identifying~~ classifying a first event as an atrial fibrillation/flutter event.

57. (Previously Presented) The method of claim 30, wherein associating information describing each event in the first proper subset comprises associating raw data drawn from an electrocardiogram with information describing the time span in which the event occurred.

58. (Previously Presented) The method of claim 30, wherein the cardiac biological signal comprises a stream of information describing a state of a heart of a biological system.

Claims 59.-60. (Canceled)

61. (New) The method of claim 15, wherein determining the merit of the information describing each event comprises determining the merit of the information based on both the severity of the cardiac condition and an amount of noise in the information describing the event.

62. (New) The method of claim 15, wherein determining the merit of the information describing each event comprises determining the merit of the information based on both the severity of the cardiac condition and a signal dropout during the event.

63. (New) The article of claim 39, wherein determining the merit of the information describing each event comprises determining the merit of the information based on both the severity of the cardiac condition and an amount of noise in the information describing the event.

64. (New) The article of claim 39, wherein determining the merit of the information describing each event comprises determining the merit of the information based on both the severity of the cardiac condition and a signal dropout during the event.